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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/730,246	12/05/2000	Jathan D. Edwards	53868US02	7896

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EXAMINER

ANGEBRANNOT, MARTIN J

ART UNIT

1756

PAPER NUMBER

DATE MAILED: 01/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action**Application No.**

09/730,246

Applicant(s)

EDWARDS, JATHAN D.

Examiner

Martin J Angebranndt

Art Unit

1756

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 22 December 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☒ The proposed amendment(s) will not be entered because:
(a) ☒ they raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ they raise the issue of new matter (see Note below);
(c) ☒ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet.

3. ☐ Applicant's reply has overcome the following rejection(s): _____.
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☒ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:


Claim(s) allowed: none.

Claim(s) objected to: none.

Claim(s) rejected: 36-55.

Claim(s) withdrawn from consideration: _____.

8. ☐ The proposed drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____.
10. ☒ Other: PTO-892


Martin J. Angebranndt
Primary Examiner
Art Unit: 1756

Continuation of 2. NOTE: While previously argued, the added limitations in the proposed claims are new limitations and were previously pointed out as narrower than or not commensurate with the scope of coverage sought at that time. The limitation of the laser beam width to FWHM of the beam is newly added as is the limitation of k to 0.57.

Continuation of 5. does NOT place the application in condition for allowance because: The rejections of record stand as the proposed claims have not been entered. In the prior art, a single pass of the laser beam exposes the resist forms a groove approximately equal to the size of the laser beam and the widths of the lands between the grooves are less than the groove width and therefore the pitch (the sum of the width of the groove and an adjacent land) is less than twice the beam width. In a defocused situation, the intensity profile is flattened and widened, but it is not clear how much this occurs in the prior art and precisely what the FWHM might be. It is likely to still be similar to the groove width, unless the sensitivity of the resist is extremely high or the beam very intense (so that the portion of the beam resulting in resist development is larger/wider than the FWHM). Contrary to the applicant's argued position, the examiner is not extending the width to the wings of the gaussian form (this would be absurd), but merely to the width which results in exposed and developed resist image. The examiner prefers a reasonable value for the width, rather than the more philosophical position asserted by the applicant. The examiner notes that the groove width divided by the pitch is clearly the determination used by the examiner for example on page 2 of the final office action, therefore the applicant's argument that the examiner assumes and infinite size to the beam is simply absurd. The applicant has stated that the groove width is entirely different from the spot size (at FWHM) on page 3 of the remarks, but fails to articulate how. The applicant argues that the Daesher reference has nothing to do with the invention at hand, but again fails to articulate how this might be when all the references applied (and the claimed invention) are directed to forming grooved optical recording media substrates. The examiner holds that they are relevant and analogous. With regard the applicant's position concerning k and values of this constant. The examiner cites Okamura et al. '885 at column 1/lines 25-35, which describes k as 0.82. The reasons for this is made more clear in Yanagawa et al. '394 at column 4/lines 1-17, which mentions a value of 0.8 for K and indicates that k changes as the position of the lens filed by the beam is increased. Therefore the examiner is not prepared to accept the applicant's admission that "the approximate value of 0.57 may fall between 0.54 and 0.60" for practical systems. The examiner could hold this to be an admission by the applicant, but it is clearly flawed. The applicant only recites a portion of the process for inverse mastering described in the specification and as the scope of the claims is not bounded by UNRECITED FEATURES, the mere presence of the preamble language does not replace the missing language and complete the process recitation.

AW
1/6/01